

Analysis of social housing construction

While the low property tax may attract homeowners who are relatively better off, some other policies could draw renters or working-class voters. Social housing construction is one of them, and local authorities can directly affect the inflow of residents by influencing housing supply. The Left mayors, who increase the property tax more than their Right counterparts, may opt for attracting their likely supporters by offering more affordable housing. The Right mayors, on the other hand, may not wish to build cheaper accommodation. Whereas the IFOP exit poll did not have detailed information on the housing status and income level, the Right supporters tend to be wealthier than the Left supporters in France.

In France, the municipal authorities are the central actors in constructing and operating social housing, while the central government financially supports local authorities. French social housing is available for low-income people, and charges rent substantially lower than the market rate. Therefore, creating many social housing units may shift the demographic balance in the municipality.

Nonetheless, the French government does have an explicit goal to prevent such sorting of the poor. The central government has promoted local desegregation (*la mixité sociale*) from the early 1990s, mainly via the construction of social housing, and the policy aimed to distribute housing for low-income households evenly in geographic space so that there would be no geographic concentration of poverty. In December 2000, the Socialist government passed *the Solidarity and Urban Renewal Act (Loi relative à la solidarité et au renouvellement urbains)*, and obliged municipalities to construct new social housing until they reach at least 20% of the housing stock in the area. The detailed obligations differ from municipality to municipality depending on their size and location. While there was no formal penalty for the violation of this 20 % rule, the law did distribute social housing to different areas in France. In 2016, social housing units accounted for approximately 17% of the French housing supply.

If every city had built social housing until it reached 20% of the stock, the municipal authorities would have had little room to manipulate their residents via housing policies. However, many municipalities did not meet the 20% goal. There was significant heterogeneity

in the level of social housing construction, and the level of commitment could be different between the Left mayors and Right mayors.

I check if the Left mayors are associated with more social housing construction. I use the 2016 micro-level housing census data from INSEE for the analysis of social housing. The micro-level data contains 25,054,666 residential units in France, 488,465 of which were completed or planned after 2014. The data included the units under construction or planning, and each unit had the year of completion or anticipated completion, construction types, and social housing status. Each observation was a residential unit, not a building.

I applied the same regression discontinuity design I used in the earlier section, to the housing stock data. For this section, the unit of analysis is the newly-built or planned residential unit, and the dependent variable is whether each unit is social housing or not ; the value takes one if they are social housing, zero otherwise. The running variable is the Left-Right margin in the 2014 municipal elections, and the treatment is having the Left mayor in the municipality. Standard errors are clustered at the municipality (*commune*) level.

Table 7 presents the results. Column 1 shows the RD result with the whole sample, and the effect is feeble. However, around half of the housing stock built or planned between 2014 and 2018 was single-family housing, of which only 0.3% is social housing. If we observe any differences, the effect should be more apparent in multi-unit housing.

Column 2 and 3 of Table 7 demonstrate that having a left mayor in the municipality will increase the probability that a newly built two-unit or multi-unit housing is social housing, by 2 to 6 percentage points. New housing units are more likely to be social housing in the municipalities governed by the Left. These results are consistent with the expectation.

Housing data may have the time lag issues, as some of the new housing units were planned under the previous municipal government, particularly among those completed in the early part of the 2014-2020 mayoral term. Columns 4 and 5 compare the effects for multi-family housing built in 2014/2015, with those units planned to be completed between 2016 and 2018. They are both significant, but the point estimate for the planned

TABLE 1: RDD : Social housing construction in the 2016 housing census

Dependent variable :	Social housing (1) or Non social housing (0)					
Treatment variable :	Having a Left mayor in 2014-2020					
Unit of analysis :	Any residential unit constructed or planned					
	(1)	(2)	(3)	(4)	(5)	(6)
Sample :						
Any residential unit built or planned in 2014-18	0.00564 (0.00359)					
Multi-unit complex 2014-2018		0.02077 (0.00620)				
Two-unit complex 2014-2018			0.05715 (0.00957)			
Two/multi-unit complex built in 2014-15				0.03134 (0.00681)		
Two/multi-unit complex to be completed in 2016-18					0.06260 (0.00644)	
Placebo (2013 Housing census) :						
Two/multi-unit complex planned in 2014-15						0.00055 (0.00828)
Robust Clustered CI (95%) : lower bound	0.00726	0.00194	0.03995	0.01957	0.05835	-0.02493
Robust Clustered CI (95%) : upper bound	0.02321	0.03171	0.08068	0.05097	0.08515	0.01364
Bandwidth (Estimate)	34.331	10.073	13.771	12.010	8.508	8.566
Bandwidth (Bias Correction)	51.994	18.850	30.763	22.096	22.234	14.353
Effective Number of Control	78881	29502	8638	31210	7204	6742
Effective Number of Treatment	53347	20210	7496	26033	5347	5735
Total number of Observation	488465	223132	79251	220833	81550	63031

housing is twice as large as that of built units. I also conducted a placebo test, using the 2013 housing census, and found that the effect is null for the housing block already planned by 2013 to be completed after 2014. The graphs do not necessarily resemble those for the sorting of retired people or tax rate changes, but they feature the dip or surge of social housing construction when the electoral outcome was close.

The analysis shows that the policy differences are observed according to the partisan affiliation of municipal authorities. Local property tax rates, as well as social housing construction, showed the discontinuity at the local level. They would naturally affect the willingness and ability of certain types of voters to move in.

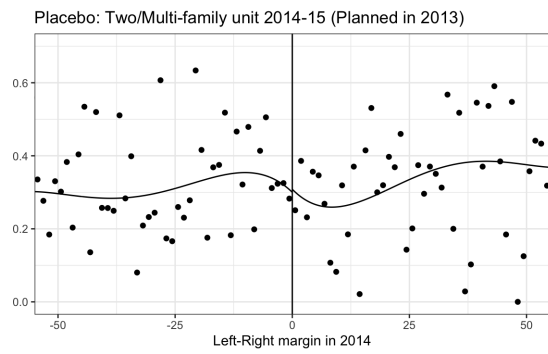
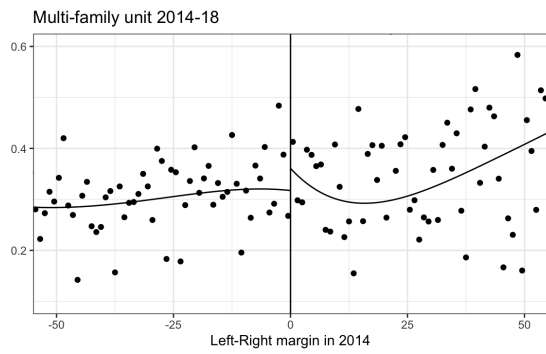
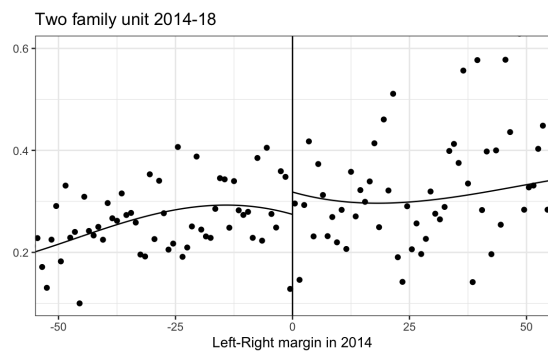
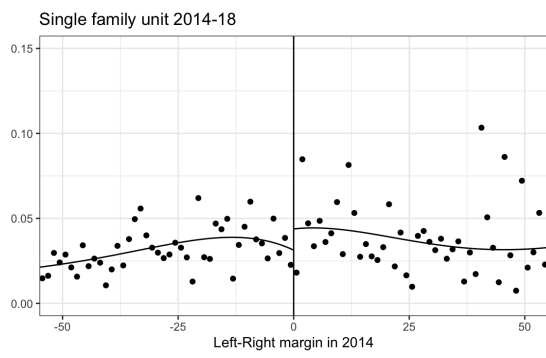


FIGURE 1: RD graphs for social housing construction